

**What is Claimed is:**

1. Radiation source for use in endovascular radiation treatment which comprises one or more treating elements (seeds) comprising a radiation emitting element, and means for containment of said radiation emitting element, wherein said seeds are sequentially, directly and movably linked to each other and/or to a transfer wire.
2. Radiation source of claim 1, wherein the means for containment is a capsule.
3. Radiation source of claims 1 and 2, wherein said means for containment comprises a metal selected from the group consisting of stainless steel, Ag, Pt, Ti, Ni, Fe, Mn, Cr, Nb, Co, Au or their alloys or a casing coated with these metals.
4. Radiation source of the proceeding claims, wherein the seeds have an elongated shape.
5. Radiation source of claim 4, wherein the central axis of the radiation source essentially parallels the elongated axis of the seeds.
6. Radiation source of the preceeding claims, wherein radiation emitting element comprises any  $\alpha$ -,  $\beta$ - and/or  $\gamma$ -emitting substance.
7. Radiation source of claim 6, wherein radiation emitting element comprises one or more radioactive materials selected from the group consisting of  $\text{Cs}^{137}$ ,  $\text{Co}^{57}$ ,  $\text{Sr}^{89}$ ,  $\text{Y}^{90}$ ,  $\text{Au}^{198}$ ,  $\text{Pd}^{103}$ ,  $\text{Se}^{75}$ ,  $\text{Sr}^{90}$ ,  $\text{Ru}^{106}$ ,  $\text{P}^{32}$ ,  $\text{Ir}^{192}$ ,  $\text{Re}^{188}$ ,  $\text{W}^{188}$  and  $\text{I}^{125}$ .
8. Radiation source according to claims 1 to 7, wherein the seeds are linked by magnetic forces to each other and/or to the transfer wire.

9. Radiation source of claim 8, wherein said means for containment comprises a magnetizable or magnetic material.
10. Radiation source of claims 1 to 9, wherein the seeds have rounded or spherical end caps on one or both ends.
11. Radiation source according to one of claims 1 to 8, wherein the seeds are mechanically linked.
12. Radiation source according to claim 11, wherein the seeds are linked mechanically and magnetically.
13. Radiation source according to claim 11 or 12, wherein the seeds comprise male and female means for coupling, which female means for coupling receive the male means for coupling of the following or preceeding seed in the radiation source to form a flexible joint.
14. Radiation source of claim 13, wherein male and female means for coupling are on opposing sides of the seed.
15. Radiation source of claims 13 or 14, wherein the male means for coupling comprises a head and optionally a spacing member and the female means for coupling comprises a receiving section for the head.
16. Radiation source of claims 13 or 14, wherein the male means for coupling is a hook and the female means for coupling is a second hook or a loop.
17. Radiation source of claims 13 to 15, wherein the male means for coupling comprises a spacing member and a spherical head and the receiving section of the female means for coupling is formed by extensions of the means for containment defining a hollow space

having a recess to receive the spacing member when the head of the male means for coupling is placed in the hollow portion of said female means for coupling.

18. Radiation source according to claim 11 or 12, wherein the at least two seeds are linked to each other by way of a flexible single joining member extending throughout the length of the radiation source.
19. Apparatus for endovascular radiation treatment, comprising an elongated catheter having a proximal end portion, a distal end portion and a lumen extending therebetween for receiving a radiation source, optionally a guide wire in a separate lumen, and a radiation source which comprises one or more treating elements (seeds) comprising a radiation emitting element and means for containment of said radiation emitting element, wherein said seeds are sequentially, directly and movably attached to each other and/or to a transfer wire.
20. Apparatus of claim 19, wherein a radiation source according to claims 1 to 18 is used.
21. Apparatus of claims 19 to 20, comprising a containment vessel for the radiation source and/or the individual seeds.
22. Apparatus of claims 19 to 21, comprising a x-ray fluoroscopy device.
23. Apparatus of claims 19 to 22, comprising a magnetic means.
24. Method for vascular radiation treatment comprising the steps of
  - (a) directing an elongated catheter having a proximal end portion, a distal end portion and a lumen extending therebetween for receiving a radiation source, to the selected site to be treated preferably by way of a guide wire in a separate lumen,

- (b) introducing a radiation source into the catheter at its proximal end portion, which radiation source comprises one or more treating elements (seeds) comprising a radiation emitting element and means for containment of said radiation emitting element, wherein said seeds are directly and movably attached to each other and/or to a transfer wire and which can be moved through said lumen of the catheter, preferably by use of a transfer wire,
  - (c) moving said radiation source to said distal end portion preferably by use of a transfer wire,
  - (d) maintaining said radiation source at said distal end for a determined period of time, and
  - (e) retracting said radiation source to the proximal end portion preferably by use of a transfer wire.
25. Method of claim 24, wherein moving and/or retracting in steps (c) and/or (e) is achieved by pushing or pulling the radiation source.
26. Method of claims 24 to 25, wherein said movement in step (c) is achieved by pushing and said movement in step (e) is achieved by pulling said radiation source.
27. Method of claims 24 to 26, wherein the seeds are linked to each other by magnetic forces and the transfer wire comprises a magnet to magnetically push and pull the radiation source in step (c) and/or (e).
28. Method of claims 24 to 26, wherein the radiation source is moved by applying an external magnetic field.
29. Method of claims 24 to 26, wherein the transfer wire comprises a male or female means for coupling and the radiation source is linked to the transfer wire by engagement with the complementary means for coupling on the terminal seed thereof.

30. Method of claims 24 to 29, wherein a radiation source according to one of claims 1 to 18 is used.